



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,924	04/30/2007	M. Yavuz Dedegil	2003P01405WOUS	9207

46726 7590 06/25/2010  
BSH HOME APPLIANCES CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
100 BOSCH BOULEVARD  
NEW BERN, NC 28562

EXAMINER
----------

BLAN, NICOLE R

ART UNIT	PAPER NUMBER
----------	--------------

1712

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

06/25/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,924	<b>Applicant(s)</b> DEDEGIL ET AL.	
	<b>Examiner</b> NICOLE BLAN	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-22 and 24-30 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The amendments to claims 22, 24, 27 and 30 in the response filed April 14, 2010 have been acknowledged.
2. In view of the amendment to the specification, the previous objections to the specification have been withdrawn.
3. In view of the amendments to the claims, the previous rejections under 35 U.S.C. 112, second paragraph have been withdrawn.

### ***Response to Arguments***

4. Applicant's arguments filed April 14, 2010 have been fully considered but they are not persuasive.
5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
6. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references

Art Unit: 1712

themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Kim teaches a dishwashing machine that contains a filter system wherein dishwashing residue contained in the dishwashing liquid is at least partially retained by the filter. Kim does not teach that the filter system includes a foam volume or that at least some of the dishwashing liquid can be discharged to the foam volume so that dishwashing residue contained in the dishwashing liquid is retained by the foam. Kemper teaches a filter for removing contaminants from a solution using foam in order to remove contaminants from the liquid. Because both Kim and Kemper teach filter systems for removing contaminants from liquids, it would have been obvious to one skilled in the art to substitute one filter system for the other to achieve the predictable result of removing contaminants from liquids.

7. In response to applicant's argument regarding the flotation process in Kemper, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

8. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Art Unit: 1712

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**11. Claims 16-22, 24, 26-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S. PGPub 2002/0074026, hereinafter ‘026) in view of Kemper (U.S. Patent 6,413,366, hereinafter ‘366).**

Claim 16: ‘026 teaches a dishwashing machine [title; abstract] comprising a dishwashing container [(d), Fig. 1; page 1, paragraph 6] that holds items to be subjected to a dishwashing liquid [Fig. 1, page 1, paragraph 6] and a filter system [(62 & 64), Fig. 1; page 1, paragraph 8] in communication with the dishwashing container so that some of the dishwashing liquid passes through the filter system wherein dishwashing residue contained in the dishwashing residue contained in the dishwashing liquid is at least partially retained by the filter [page 1, paragraph 11]. ‘026 does not teach that the filter system includes a foam volume or that at least some of the dishwashing liquid can be discharged to the foam volume so that dishwashing residue contained

Art Unit: 1712

in the dishwashing liquid is retained by the foam volume. However, '366 teaches a filter for removing contaminants from a solution using foam such that the liquid solution is passed through the foam in order to remove contaminants from the liquid [abstract; col. 2, line 30—col. 3, line 7]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the filter taught by '366 in place of the filter of '026 with a reasonable expectation of success because '366 teaches that the filter removes contaminants from an incoming liquid by use of foam in order to retain the contaminants in the foam. Therefore, modified '026 teaches that the dishwashing liquid flows into a filter system and through a foam volume in order to retain contaminants from the dishwashing liquid in the foam.

Claim 17: '026 and '366 teach the limitations of claim 16 above. '366 teaches mixing an incoming liquid with an incoming gas to produce the foam [reads on “foam developer”; Fig. 1; col. 2, lines 30-41]. Modified '026 teaches that the liquid introduced to the filter is dishwashing liquid, so the mixing of dishwashing liquid with a gas produces foam. Regarding the recitation “mix...at least one of the dishwashing liquid and a non-dishwashing liquid with air”, this recitation is a statement of intended use which does not patentably distinguish over modified '026 since modified '026 meets all the structural elements of the claim(s) and is capable of mixing the dishwashing liquid with air if so desired. See MPEP 2114.

Claim 18: '026 and '366 teach the limitations of claim 16 above. '366 also teaches a filter container for retaining the foam [see Fig. 1].

Art Unit: 1712

Claim 19: '026 and '366 teach the limitations of claim 18 above. '366 also teaches that the filter container includes a wall on the filter container [see wall to the left where the fluids are introduced to the container; Fig. 1], the wall has an opening through which a gas can be introduced into the filter container [Fig. 1; col. 2, lines 30-36]. Regarding the recitation "at least one of air", this recitation is a statement of intended use which does not patentably distinguish over modified '026 since modified '026 meets all the structural elements of the claim(s) and is capable of introducing air as the particular gas if so desired. See MPEP 2114. '366 discloses the claimed invention except for the wall having openings over at least a portion thereof. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an additional opening in the wall to introduce the gas, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 20 and 21: '026 and '366 teach the limitations of claim 18 above. '366 also teaches that the filter container includes a wall on the filter container [see wall to the left where the fluids are introduced to the container; Fig. 1], the wall has an opening through which a liquid can be introduced into the filter container and liquid is introduced through a nozzle with a plurality of openings [reads on "distributor nozzle...liquid is introduced into the filter container in fine jets"] [Fig. 1; col. 2, lines 30-44 and 59-62]. Modified '026 teaches that the liquid introduced to the filter is dishwashing liquid.

Claim 22: '026 and '366 teach the limitations of claim 18 above. '366 teaches that the filter has a first outlet [(S'), Fig. 1] and a second outlet [(R), Fig. 1]. Regarding the recitation "a

Art Unit: 1712

first outlet through which the cleaned dishwashing liquid is discharged...a second outlet through which the foam volume is discharged", this recitation is a statement of intended use which does not patentably distinguish over modified '026 since modified '026 meets all the structural elements of the claim(s) and is capable of introducing air as the particular gas if so desired. See MPEP 2114.

Claim 24: '026 and '366 teach the limitations of claim 22 above. '366 teaches that the outlet [(S') located within (7) in Fig. 1 – reads on “first outlet”] has a variable-height overflow. Based upon the rejection under 35 U.S.C. 112, second paragraph above, the limitation is met.

Claim 26: '026 and '366 teach the limitations of claim 18 above. '026 also teaches that the filter container is disposed between the dishwashing container [(d), Fig. 1] and an outer wall of the dishwashing machine [the entire casing in Fig. 1].

Claim 27: '026 teaches a dishwashing machine [title; abstract] comprising a dishwashing container [(d), Figs. 1&3; page 1, paragraph 6] that holds items to be subjected to a dishwashing liquid [Figs. 1 & 3, page 1, paragraph 6] and a filter system [(80, 81, 82), Fig. 3; pages 3-4 paragraphs 55-65] in communication with the dishwashing container so that some of the dishwashing liquid passes through the filter system [pages 3-4 paragraphs 55-65] and that it is known to remove the contaminants collected via the filter from the dishwasher [Figs. 10A&B; pages 3-4 paragraphs 55-65]. '026 does not teach that the filter system includes a foam volume or that at least some of the dishwashing liquid can be discharged to the foam volume so that



Art Unit: 1712

dishwashing residue contained in the dishwashing liquid is retained by the foam volume.

However, '366 teaches a filter for removing contaminants from a solution using foam such that the liquid solution is passed through the foam in order to remove contaminants from the liquid and that the liquid and foam both exit the filter [abstract; col. 2, line 30 - col. 3, line 7]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the filter taught by '366 in place of the filter of '026 with a reasonable expectation of success because '366 teaches that the filter removes contaminants from an incoming liquid by use of foam in order to retain the contaminants in the foam. Therefore, modified '026 teaches that dishwashing liquid flows into the filter system where dishwashing residue is retained by the foam (see teaching of '366), and the newly filtered dishwashing liquid is cycled back to the dishwasher via the circulation pump (see circulation pump (70) of '026), and the foam containing the residue is discharged from the washer using the drain pump (see drain (70) of '026).

Claim 28: '026 and '366 teach the limitations of claim 27 above. '366 teaches mixing an incoming liquid with an incoming gas to produce the foam [reads on “foam developer”; Fig. 1; col. 2, lines 30-41]. '366 also implicitly teaches that the liquid is mixed with air because '366 teaches that air bubbles are formed so that contaminants will accumulate in the air bubbles [col. 2, lines 44-54]. Modified '026 teaches that the liquid introduced to the filter is dishwashing liquid, so the mixing of dishwashing liquid with air produces foam.

Claim 30: '026 and '366 teach the limitations of claim 27 above. '366 also teaches that a liquid can be introduced through a nozzle with a plurality of openings [reads on “distributor

Art Unit: 1712

nozzle...liquid is introduced into the filter container in fine jets”] [Fig. 1; col. 2, lines 30-44 and 59-62]. Modified '026 teaches that the liquid introduced to the filter is dishwashing liquid.

**12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S. PGPub 2002/0074026, hereinafter '026) in view of Kemper (U.S. Patent 6,413,366, hereinafter '366), and further in view of Damron et al. (U.S. Patent 6,402,855, hereinafter '855).**

Claim 25: '026 and '366 teach the limitations of claim 17 above, but they do not teach that the dishwashing liquid is supplied to the foam developer by a circulating pump. However, '855 illustrates that it is known to withdraw solution from a container for washing using a pump [reads on “circulating pump” because the solution is circulated from (112) in Fig. 6 back into the container at (132/158)] and then feeding the solution through a filter [(108), Fig. 6] before it is returned to the chamber [see Fig. 6; cols. 9 and 10]. Therefore, it would have been obvious to an ordinary artisan to supply the dishwashing liquid of modified '026 to the foam developer via circulating pump as taught by '855 because '855 illustrates it is known to withdraw a solution from a container using a pump, feed it through a filter before the solution is circulated back into the container.

Art Unit: 1712

**13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S. PGPub 2002/0074026, hereinafter '026) in view of Kemper (U.S. Patent 6,413,366, hereinafter '366), and further in view of Valenzuela et al. (U.S. Patent 5,234,112, hereinafter '112).**

Claim 29: '026 and '366 teach the limitations of claim 27 above. '026 and '366 do not teach externally generating the foam and then introducing the foam into the filter container. However, '112 teaches that it is known to use a foam reactor [reads on "filter"; (1), Fig. 2] with an external foam generator [(9), Fig. 2] so that the solution entering the reactor and the foam introduced into the reactor are mixed within the reactor so that the particles to be removed have time to adhere to the foam [col. 1, lines 36-56 and 65-67; col. 2, lines 28-48]. Therefore, it would have been obvious to an ordinary artisan to use an external foam generator as illustrated by '112 in the modified method of '026 with a reasonable expectation of success because '112 teaches that by externally generating the foam and introducing it to the reactor there is time for the particle being removed to adhere to the foam.

***Allowable Subject Matter***

14. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claim 23 is object allowed for the reasons previously present in the Office Action mailed January 27, 2010.

***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE BLAN whose telephone number is (571)270-1838. The examiner can normally be reached on Monday - Thursday 8-5 and alternating Fridays 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

Art Unit: 1712

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicole Blan/  
Examiner, Art Unit 1712

/Michael Cleveland/  
Supervisory Patent Examiner, Art Unit 1712